

PRODUCT SPECIFICATION

STATENS
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HYB 333-06 Anti Pertussis Toxin

Mouse monoclonal antibody

Article No.	63949 (0.2 mL), 100698 (1.0 mL)																
Product Name	HYB 333-06 Anti Pertussis Toxin																
Clone	47.1G2A1E10E11																
Subclass	IgG1 / kappa																
Description	Preparation: Protein-A purified Concentration: 1 mg/mL \pm 10%, based on A ₂₈₀ . See Certificate of Analysis for details. Solvent: PBS, pH 7.2 – 7.4 Storage: -18 °C or colder																
Antigen	Pertussis toxin (islet-activating protein) is the major protein toxin produced by virulent strains of <i>Bordetella pertussis</i> , the organism that causes whooping cough (1). As revealed by polyacrylamide gel electrophoresis, the purified protein consists of five dissimilar subunits: S1 (MW 28,000), S2 (MW 23,000), S3 (MW 22,000), S4 (MW 11,700) and S5 (MW 9,300), in a molar ratio of 1:1:1:2:1. The A-protomer, S1 is responsible for the enzymatic activity of the toxin. Together, S2, S3, S4 and S5 comprise the B-oligomer, responsible for binding the toxin to the cell surface (2).																
Immunogen	Pertussis toxin.																
Specificity	HYB 333-06 (3) reacts with pertussis toxin.																
Epitope Specificity	HYB 333-06 has a different epitope specificity compared with HYB 333-01, HYB 333-03, HYB 333-05 and HYB 333-09.																
Reactivity	HYB 333-06 (MAb clone 47.1) (3) is well suited for ELISA based measurement of pertussis toxin. HYB 333-06 can neutralize pertussis toxin when measured by Chinese Hamster Ovary cell assays and Leucocytosis promoting activity (4).																
Culture Medium	Dulbecco's modified Eagle's medium with 10% fetal calf serum.																
Fusion Partner	X63-Ag8.653.																
Immunization	Female CF1xBalb/c F1 hybrid mice were immunized i.p. with immunogen.																
Application	<table><thead><tr><th>Method</th><th>Usability</th><th>References</th></tr></thead><tbody><tr><td>ELISA</td><td>yes</td><td>4</td></tr><tr><td>Immunoblotting</td><td>yes</td><td>5</td></tr><tr><td>Immunofluorescence</td><td>nd.</td><td></td></tr><tr><td>Neutralization</td><td>yes</td><td>4</td></tr></tbody></table>	Method	Usability	References	ELISA	yes	4	Immunoblotting	yes	5	Immunofluorescence	nd.		Neutralization	yes	4	
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References	<ol style="list-style-type: none">1) Pittman, M. (1979) Rev. Infect. Dis. 1, 401-412.2) Tamura, M., Nogomori, K., Murai, S., Yajima, M., Ito, K., Katada, T., Ui, M. and Ishi, S. (1982) Biochem. 21, 5516-5522.3) HYB 333-06 is known from the literature as "47.1".4) Ibsen, P.H. (1996). The effect of formaldehyde, hydrogen peroxide and genetic detoxification of pertussis toxin on epitope recognition by murine monoclonal antibodies. Vaccine, 14, 359-3685) Petersen JW, Holm A, Ibsen PH, Hasløv K, Capiou C, Heron I. Identification of human T-cell epitopes on the S4 subunit of pertussis toxin. Infect Immun. 1992 Oct;60(10):3962-70.																

Conditions

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